

Abstract

A modular construction micro-reactor with parallel microchannels on fluid guide plates for chemical reactions, but not for evaporation purposes is known. A

5 modular construction falling film evaporator is disclosed, comprising a stack of alternate gap-like evaporation chambers and sheet-like evaporator modules with an assembly of parallel microchannels, whereby the evaporation chambers are open above and/or below across the whole width of the module and the stack is arranged in a container. The falling film evaporator is used in a method for obtaining a

10 gaseous phase from a liquid medium on a technical scale and is suitable for the concentration of thermolabile solutions and rapidly adjustable production of a gas stream.